METHOD OF FABRICATING POLYSILICON FILM BY EXCIMER LASER CRYSTALLIZA-TION PROCESS

Abstract

A method of fabricating a polysilicon film by an excimer laser crystallization process. First, a substrate comprising a first region and a second region is provided. An amorphous silicon layer and a mask layer are formed on the substrate in sequence. Then, a photo-etching process is performed to remove the mask layer in the first region. A heat-retaining capping layer is formed on the mask layer and the amorphous silicon layer. After that, an excimer laser crystallization process is performed so that the amorphous silicon layer in the first region is crystallized into a polysilicon film.